Title (en)
SYSTEM AND METHOD FOR OPTIMIZING A SPORTS BALL LAUNCH

Title (de)
SYSTEM UND VERFAHREN ZUR OPTIMIERUNG DES ABWURFS EINES SPORTBALLS

Title (fr)
SYSTÈME ET PROCÉDÉ POUR OPTIMISER UN LANCÉ DE BALLE DE SPORT

Publication
EP 3768398 B1 20231227 (EN)

Application
EP 19773174 A 20190717

Priority
• US 201862699449 P 20180717
• IB 2019056088 W 20190717

Abstract (en)
[origin: US2020023235A1] A method includes identifying, from trajectory data for a kick, kick parameters for and adjusting a value of a first one of the kick parameters to a new value to calculate a first simulated trajectory in relation to a target area in combination with adjusting the value of the first kick parameter to a second value to calculate a second simulated trajectory and calculating a first blocked portion of the target area based on the first simulated trajectory and an obstacle between a launch position and the target area and a second blocked portion of the target area based on the second simulated trajectory and the obstacle. In addition, an optimized value of the first kick parameter is determined where a simulated trajectory of the ball calculated kicked with the optimized value results in a successful kick into the largest unblocked portion of the target area.

IPC 8 full level
A63B 24/00 (2006.01); **A61B 5/11** (2006.01); **A63B 69/00** (2006.01); **A63B 71/06** (2006.01); **G01B 11/00** (2006.01); **G01S 13/72** (2006.01); **G06T 7/254** (2017.01)

CPC (source: EP KR US)
A61B 5/1122 (2013.01 - EP KR); **A61B 5/1128** (2013.01 - EP); **A63B 24/0021** (2013.01 - EP KR US); **A63B 69/002** (2013.01 - EP KR US); **A63B 71/0605** (2013.01 - EP KR); **G01S 13/72** (2013.01 - EP KR); **G01S 13/88** (2013.01 - EP KR); **G06T 7/20** (2013.01 - EP KR); A61B 2503/10 (2013.01 - EP); A63B 71/0619 (2013.01 - US); A63B 2024/0028 (2013.01 - KR US); A63B 2024/0034 (2013.01 - EP KR); A63B 2024/0056 (2013.01 - KR US); A63B 2208/0204 (2013.01 - KR US); A63B 2220/30 (2013.01 - EP KR); A63B 2220/31 (2013.01 - US); A63B 2220/35 (2013.01 - US); A63B 2220/80 (2013.01 - KR US); A63B 2220/802 (2013.01 - EP); A63B 2220/89 (2013.01 - EP); A63B 2243/0025 (2013.01 - EP KR); G06T 2207/30224 (2013.01 - EP KR); G06T 2207/30241 (2013.01 - EP KR); G09B 19/0038 (2013.01 - US)

Cited by
US2020306960A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
US 2020023235 A1 20200123; CN 112423851 A 20210226; CN 112423851 B 20230725; EP 3768398 A1 20210127; EP 3768398 B1 20231227; EP 3768398 C0 20231227; JP 2021530318 A 20211111; JP 7087188 B2 20220620; KR 20200130724 A 20201119; KR 20230070516 A 20230523; WO 2020016790 A1 20200123

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